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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,167	04/06/2000	Hiroyuki Urushiya	35.G2566	9371

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NEW YORK, NY 10112

EXAMINER
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TRAN, NHAN T

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/544,167

Applicant(s)

URUSHIYA, HIROYUKI

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 31-33, 35 and 37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 31-33, 35 & 37 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 31-33, 35 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fossum et al (US 6,611,288) in view of Ianni et al (US 5,185,883).

Regarding claim 1, Fossum discloses an image processing apparatus (col. 1, lines 5-7 and col. 2, lines 15-20) comprising:

extraction means (control 200) for extracting (reading out) a pixel signal of an image pickup means that has a plurality of pixels, and for determining positional information (addresses) of defective pixels based on the pixel signal information (col. 2, lines 21-65);

block forming means (combination of control 200 and register 204) for judging whether a plurality of the defective pixels are adjacent to each other (contiguous dead pixels) on the basis of the positional information of the defective pixels, encoding the adjacent defective pixels

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which are continuously located in one direction (i.e., a defective row, a defective column, etc. in form of R, C, T, wherein R is row, C is column and T is a three-bit code area type). See col. 3, lines 1-23. Fossum also discloses storage means (300) for storing the area type code T, and correction means for correcting the defective pixels by using peripheral pixels of the defective pixels, wherein the correction means integrates the area type codes T into region information (to form a complete indicia R, C, T) of the defective pixels which are adjacent to each other, and wherein the correction means do not use the other defective pixels based on the regional information. See col. 3, lines 1-23, 42-46; col. 3, line 55 – col. 4, line 27 and col. 5, lines 1-5.

Fossum does not specifically disclose that the area type T codes are run length codes which are information of the plurality's first coordinate values and lengths. As taught by Ianni, it is well known that a run length encoding circuit (54) is implemented with pixel intensity detection circuit (52) of an imaging processing apparatus to encode addresses of defective pixels (failure pixel signals) and store run length codes into buffers/registers such that contiguous defective pixels having the same intensity (either white or black) are detected and classified into groups (see Ianni, Fig. 2, col. 3, lines 30-56 and col. 6, lines 27-55).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the image processing apparatus in Fossum to use run-length codes in place of the area type T as an alternative encoding configuration for classifying groups of defective pixels.

Regarding claim 31, Fossum in view of Ianni further discloses that the block forming means expresses the position and the width of the defective pixels adjacent in one direction using the run-length coding (see Fossum, col. 3, lines 1-23 and Ianni, col. 3, lines 44-56).

Regarding claim 32, Fossum further discloses that the correction means takes a pixel region necessary (nearest pixel region as a simplest example) to correct the adjacent defective pixels from an output of the image pickup means and corrects those defective pixels in that pixel region by using the regional information (col. 3, line 55 – col. 4, line 27; col. 5, lines 1-5).

Regarding claim 33, Fossum clearly discloses that all pixels do not fall within the specified performance windows are identified and their addresses are stored in the registers 300 (see col. 2, lines 63-65).

Regarding claim 35, the method claim is also met by the analysis of the apparatus claim 1.

Regarding claim 37, see the analysis of claim 1. Fossum further discloses that the operation of the imaging system is implemented by either hardware configuration or software configuration (col. 4, lines 24-27) and the operation is executed according to prestored routine or user-alterable routine (col. 3, lines 45-46) that indicates an inherent storage medium for storing a program to run the image processing operation.

*Conclusion*

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

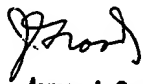
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.

  
James J. Groody  
Supervisory Patent Examiner  
Art Unit 262-2615